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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,712	08/08/2006	Wolfgang Fischer	W1.2278 PCT-US	1992

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Douglas R Hanscom
Jones Tullar & Cooper
Eads Station
PO Box 2266
Arlington, VA 22202

EXAMINER

KRUER, STEFAN

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3654

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,712	Applicant(s) FISCHER ET AL.	
	Examiner Stefan Krueer	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27, 29 - 36, 38 - 45 and 49 - 52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27, 29 - 36, 38 - 45 and 49 - 52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claims 37 – 38, 40 – 42 and 48, previously found as containing allowable subject matter, yet objected to as being dependent upon a rejected base claims, per the previous office action mailed 9 July 2008, are herein rejected over newly cited prior art of record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27, 29 – 32, 38 – 45 and 49 - 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leanna et al (4,280,669) in view of Leskinen et al (6,010,091).

Re: Claims 27, 38 and 43, Leanna et al disclose a method for threading a material web (7, Fig. 1) in a web processing machine (Fig. 1) including:

- providing a web receiving area (encompassing 10) in said web processing machine;
- providing a web delivery area (incl. 5) in said web processing machine;
- providing a web threading path extending between said web receiving area and said web delivery area (defined by travel from 6 through 18);
- providing a drive motor (87) at said web receiving area and a second drive motor (understood) at said web delivering area;
- regulating a first motor at a predetermined web threading speed (Col. 10, L. 15 and Col. 7, L. 34, "... web is constrained to advance ... at a predetermined speed...") at said web delivery area;

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- regulating a second motor at a predetermined motor torque (Col. 4, L. 19 – 43, Col. 7, L. 34 – 37 and Col. 19, L. 17 - 20); and
- at least one mechanically independent assembly (119, Fig. 19, Col. 22, L. 46 - 60) in said web processing machine and a machine control (118) usable to provide speed relevant signals to said one of said first and second motors and to said at least one mechanically independent assembly; and
- a virtual rotational axis for said machine control and being usable to transmit said speed relevant signals (Col. 22, L. 46 – 60); however,

Leanna et al are silent with respect to a web threading means.

Attention is directed to Leskinen et al who teach their method for threading comprising threading means (21, 25, 32 and 34, Fig. 4, Col. 5, L. 37 - 45) and a second motor (understood) at his web delivery area (12) and regulating said second motor at a predetermined speed, for affording tension control (Col. 6, L. 24 – 34 and Col. 2, L. 51).

It would have been obvious to one of ordinary skill in the art to modify the reference of Leanna et al with the teaching of Leskinen et al for minimizing broke.

Re: Claims 29, 44 and 51, Leanna et al disclose further providing a frequency converter (T, Col. 19, L. 36) and using said frequency converter for regulating said first motor as well as a predetermined *threading* speed (“... predetermined speed of web advance”) and a signal connection between their first motor and their control device, wherein said control device (118) includes calculating means to provide a frequency output for said motor based on a predetermined threading speed and a number of rotations (Col, 22, L. 46 – 60).

Re: Claim 30, Leanna et al are silent with respect to a threading means.

Attention is directed to Leskinen et al who teaches his second reel body (32) and using said second motor for driving said second reel body for purpose of providing wound material and affording tension control independent of sheet/threading speed; however, Leskinen et al are silent with respect to a first reel body.

Though Leskinen et al are silent with respect to a first reel body about which their threading means is unwound, said second reel body having dedicated drive motor, such

reel body and motor to provide constant, slightly higher peripheral speed for take-up of their web from their web delivery area would have been an obvious matter of design choice in view of the disclosure of Leanna et al.

It would have been obvious to one of ordinary skill in the art to modify the reference of Leanna et al with the teaching of Leskinen et al for performance.

Re: Claims 31 - 32, though Leanna et al disclose regulating a current diameter of his reel body (18) in his web receiving area (by means of 119 and 118) for regulating his first motor with respect to a current diameter of his reel body, Leanne et al are silent with respect to a threading means.

Leskinen et al teach their reel body (32) of their threading means, wherein their threading means are wound about their reel body; however, Leskinen et al are silent with respect to regulating a current diameter of their reel body.

Nevertheless, in view of the disclosure of Leanna et al and the teaching of Leskinen et al, it would have been obvious to one having ordinary skill in the art to regulate the first motor based on a current diameter of a reel body for feedback motor control within a control system for performance.

Re: Claim 39, Leanna et al disclose at least one rotary drive (D) for at least one mechanically independent assembly (28) in said web processing machine and controlling said first motor and said assembly motor with each other with respect to speed (Col. 21, Line 34 - 42).

Re: Claim 40, Leanna et al disclose their material web changer (23) having a reel changer drive correlated with each other with respect to their speed by using a machine control (Col. 18, L. 8 – 35 and Col. 22, L. 19 - 68).

Re: Claim 41, Leanna et al disclose their web processing machine having a reel printing unit (9, Fig. 1, Col. 10, L. 18) and printing unit drive (understood) further including controlling said second motor and said printing unit drive with respect to each other by using a machine control (understood, in order to maintain web tension/speed).

Re: Claim 42, though Leanna et al review a control of torque of their first motor, Leanna et al are silent with respect to their control device including servo control.

Attention is directed to Leskinen et al who teach their control device including servo control in terms of target and measured tension values for optimizing tension control of their web.

It would have been obvious to one of ordinary skill in the art to modify the reference of Leanna et al with the teaching of Leskinen et al for feedback motor control within a control system for performance.

Claim 45, Leanna et al disclose their machine control (Col. 19, L. 37) is *adapted* to provide their control device (118) with a demand value, wherein a machine control *adapted* to provide a control device with a target value for said predetermined threading speed is not a positive limitation and only requires the ability to so perform.

Attention is directed to Leskinen et al who teach their target value for their predetermined threading speed (Col. 6, L. 26 - 28), wherein a target value is compared to a "...value given by the measurement of tension" for regulating their drive gear.

It would have been obvious to one of ordinary skill in the art to modify the reference of Leanna et al with the teaching of Leskinen et al for utility.

Claim 49, Leanna et al disclose their first reel body (18) and a second reel body (6) in their respective receiving and delivery areas, wherein first (understood) and second motors (87) are adapted to drive a respective reel body.

Claim 50, Leanna et al disclose a rotation sensor (119) on their first reel body.

Claim 52, Leanna et al disclose a control device *useable* to regulate said other of said first and second motors with respect to torque (Col. 4, L. 19 – 43).

In reference to the claim language referring to *useable to regulate said other of said first and second motors with respect to torque*, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior

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art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Claims 33 – 36, are rejected under 35 U.S.C. 103(a) as being unpatentable over Leanna et al in view of Leskinen et al, as applied to Claims 31, 44 and 43, respectively, in further view of Kampf (4,387,861).

Re: Claims 33 – 36, Leanna et al disclose speed control of his web processing machine through his pulse generator (119) and frequency converter (T) for input to his control device (118) to regulate his first motor, regardless of the thickness of his web (Col. 8, L. 37 – 59).

Leskinen et al are silent with respect to regulating a current diameter of their reel body.

Attention is directed to Kampf who teach the prior art of regulating a first motor with respect to a reel body current diameter (Col. 1, L. 32) as well as his inventive feature of regulating his first motor independent of his reel body current diameter (Col. 2, L. 26), therein in the alternative to:

- including providing a control device and using said control device for determining a target value of a frequency load to said at least one motor depending on said reel body current diameter.
- including determining said current reel body diameter depending on a number of layers of said threading means wound on said reel body and a thickness of said threading means and further depending on an initial diameter of said reel body.
- including providing a rotation sensor on one of said reel body and its drive, calculating a number of rotations of said reel body and using said number of rotations for determining said number of layers of said threading means wound on said reel body.

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- including determining said number of rotations of said reel body in said receiving area.
- including determining said number of rotations of said reel body in said delivery area.

Nevertheless, in that Kampf briefly reviews the prior art in which the detection of a reel body current diameter is a control parameter, the aforementioned rotation sensors and determining of reel body diameter depending on a number of layers of said threading means would have been obvious to one having ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art to modify the invention of Leanna et al and Leskinen et al with the teachings of Kampf for utility.

Response to Arguments

Applicant's arguments with respect to **Claims 37, 38 and 48** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Traise (3,955,737) and Drake (1,925,866) are cited for methods and devices for threading a web in a web processing machine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571.272.6856. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/Stefan Kruer/

Examiner, Art Unit 3654

14 December 2008

/Peter M. Cuomo/

Supervisory Patent Examiner, Art Unit 3654